100300

Item ID:	D4034-041		Accept	***N900040100***	Setup	Start	***NS1***
Revision ID:	ı					Stop	***NS2***
Item Name:	Aft Upper Rib Assembly						

| Start Date: | 4/30/13 | Start Qty: | 4.00 | *4* 4 | Cust Item ID: | | |
| Required Date: | 4/30/13 | Req'd Qty: | 4.00 | *4* | Customer: | | |

Reference:

| Approvals: | Process Plan: _MLS_ | Date: _13-04-24_ | Tooling: _____ | Date: _____ | Run | Start | ***NR1*** |
| | QC: _____ | Date: _____ | SPC (Y/N): _____ | Date: _____ | | Stop | ***NR2*** |

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D4034	~~Dot~~ B _AD13.04.25_								
100	Weld per dwg A/R S.S. rod Batch _m122357_	0.00							
100 Large Fab									(x4) _me_ 13-06-12
Large Fab	**Memo**	0.00							
	1- Assemble ribs to hoop and weld as per dwg DT9564								
	2- Weld bushing in rib and grind weld flush as per dwg								
110	QC9- Inspect visual per QSI004- Fusion Welds	0.00							DAS 09 9-89
110 QC	**Memo**	0.00							(4) 13-06-12
Quality Control									
120	QC5- Inspect part completeness to step on W/O	0.00							DAS 09 9-89
120 QC	**Memo**	0.00							(4) 13-06-12
Quality Control									

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		
Part No. _____		
NCR No. _____		

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐   Crosstube ☐   Water Jet ☐   Engineering ☐
Machining ☐   Small Fab ☐   Prod. Eng. Coor. ☐   Quality ☐
Thermoforming ☐   Finishing ☐   Rec/Store/Packaging ☐   Other ☐
Large Fab ☐   Composite ☐   Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric to O/S
☐ Cracks
☐ Crushed/Crimped
☐ Cuffs
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Ripples in Bend
☐ Torque Waves in Extrusion
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damaged
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drill Holes
☐ Drawing
☐ Finish
☐ Folio

☐ Grain
☐ Hardware
☐ Inspection Incomplete
☐ Instructions Incomplete/Unclear
☐ Maintenance
☐ Mislabeled
☐ Misread
☐ Offset
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions

☐ Ovalized
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
_____
_____
_____

Item ID: D4034-041

Revision ID:

Item Name: Aft Upper Rib Assembly

Start Date: 4/30/13   **Start Qty:** 4.00

Required Date: 4/30/13   **Req'd Qty:** 4.00

Reference:

Accept

N9000040100

4

4

Cust Item ID:

Customer:

Setup Start *NS1*

Stop *NS2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 ***130*** Packaging Packaging	Identify as per dwg & Stock Location: *W A4* Memo	0.00 0.00	*Cpc13·6·17*		*4*				
140 ***140*** QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						*13/6/19*	

mf 13-6-18

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	**DISPOSITION** Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	**AGAINST DEPARTMENT/PROCESS**

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	General			
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized	☐ Pressure/Forced
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance	☐ Temperature/Cure
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect	☐ Weld
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing	☐ Wrong Stock Pulled
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved	
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong	
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge	☐ Other
☐ Ripples in Bend	☐ Drill Holes	☐ Offset		
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration	_____	
☐ Turning Sequence	☐ Finish	☐ Out of Sequence	_____	
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions	_____	

Work Order ID:	100300				
Parent Item:	D4034-041			Start Date: 4/30/13	Required Date: 4/30/13
Parent Item Name:	Aft Upper Rib Assembly			Start Qty: 4.00	Required Qty: 4.00

Comments: IPP RevA: new issue DD 09.11.23 verified by:EC ... IPP Rev:B as per dwg revA 10.03.15 verified by:EC   IPP Rev:C 11.01.19 AS PER DWG REV.B DD VERF:EC   IPP Rev:D 13.03.14 AS PER DWG REV.pc1 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3759-1 Bushing		Manufactured	No			100	Each	316.0000	1	4			

Location	Loc Qty	Loc Code
WA004	316	
66489	1	
79213	1	
83464	7	
86550	20	
88236	3	
89780	3	
90786	11	
98089	30	
98756	240	

N/A DD13.04.25

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4034-1 Rib		Manufactured	No			100	Each	13.0000					

B97991 x 8

Location	Loc Qty	Loc Code
WA004	13	
83755	1	
89359	1	
95920	11	

(x8) 4 mc 13-06-12

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4034-3 Rib		Manufactured	No			100	Each	20.0000	1				

(x8) 4 mc 13-06-12

Location	Loc Qty	Loc Code
WA	7	
95137	7	
WA005	3	
84590	1	
94179	2	
WA006	10	
94735	10	

x8

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS				
	Rework ☐		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	
Part No. _____	Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐	
	Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	
NCR No. _____	Work Order Update ☐		Large Fab ☐	Composite ☐	Supplier ☐		

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio

- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions

- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge

- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____
_____
_____
_____

Work Order ID:	100300				
Parent Item:	D4034-041		Start Date: 4/30/13	Required Date: 4/30/13
Parent Item Name:	Aft Upper Rib Assembly		Start Qty: 4.00	Required Qty: 4.00

D4021-7
Hoop   Manufactured   No   100   Each   9.0000   1

B100432 + 4   🅐 4 *mc* 13-06-12

Location	Loc Qty	Loc Code
WA004	9	
88428	3	
97560	4	
97724	2	

D4021-9
Bushing   Manufactured   No   100   Each   165.0000   4

B102482 × 16   🅐 16 *mc* 13-06-12

Location	Loc Qty	Loc Code
WA002	4	
99143	4	
WA004	161	
66437	2	
70333	4	
72482	4	
82977	1	
84717	3	
88077	23	
88377	7	
92020	12	
98702	31	
98877	74	

~~D4034-1~~

WORK ORDER NON-CONFORMANCE / UPDATE

NCR: Yes / No

QA Closed: _____ Date: _____

Work Order: _____	**DISPOSITION**		**AGAINST DEPARTMENT/PROCESS**				
Part No. _____	Rework ☐		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	
	Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐	
	Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	
NCR No. _____	Work Order Update ☐		Large Fab ☐	Composite ☐	Supplier ☐		

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	General			
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized	☐ Pressure/Forced
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance	☐ Temperature/Cure
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect	☐ Weld
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing	☐ Wrong Stock Pulled
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved	
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong	
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge	☐ Other
☐ Ripples in Bend	☐ Drill Holes	☐ Offset		
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration	_____	
☐ Turning Sequence	☐ Finish	☐ Out of Sequence	_____	
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions	_____	

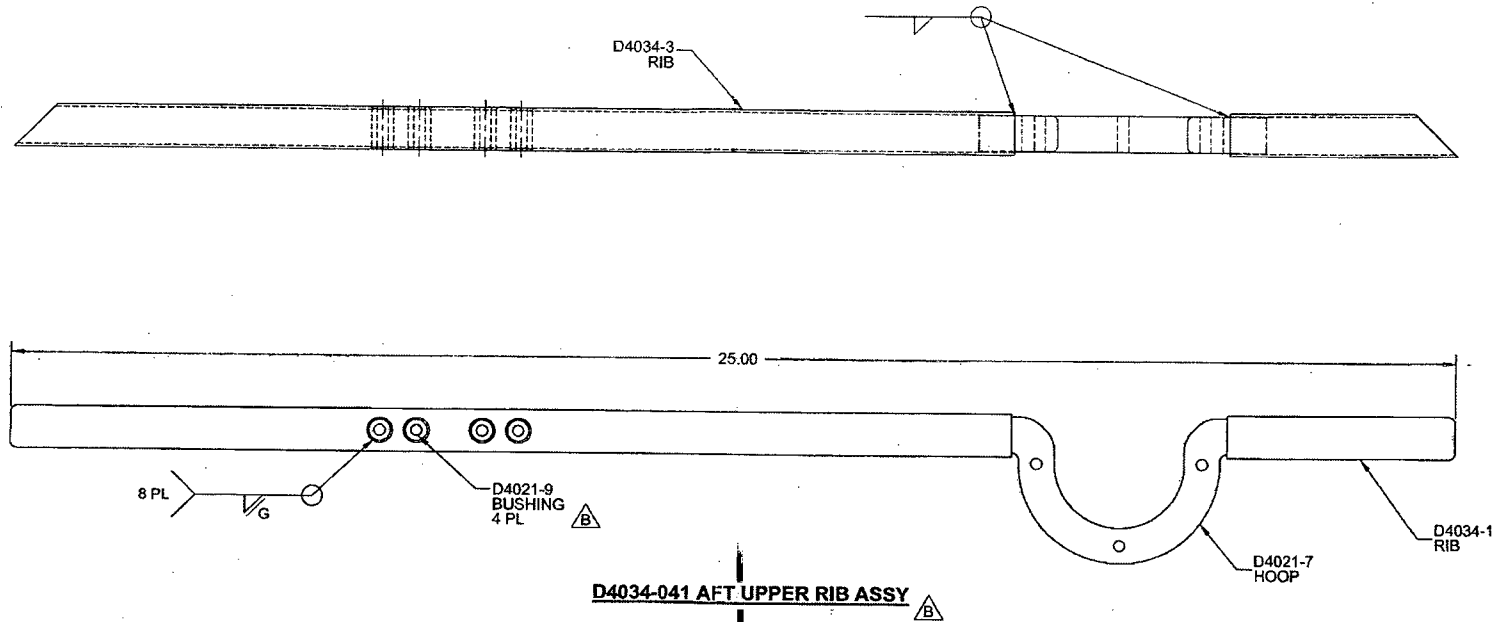| ITEM	QTY -041	QTY -043	P/N	DESCRIPTION	
	X		D4034-041	AFT UPPER RIB ASSY	B
		X	D4034-043	FWD UPPER RIB ASSY	
1	1	1	D4034-1	RIB	
2	1		D4034-3	RIB	B
3		1	D4034-5	RIB	
4		1	D2327-3	SPACER BUSHING	
5	1	1	D4021-7	HOOP	
6	4		D4021-9	BUSHING	B
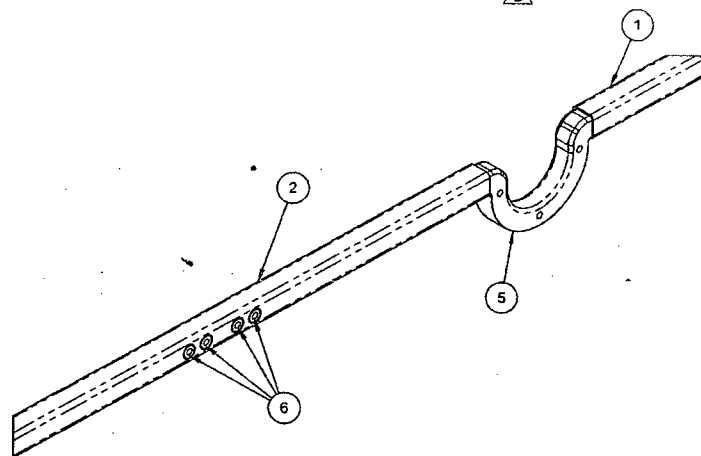
D4034-041 AFT UPPER RIB ASSY /B\
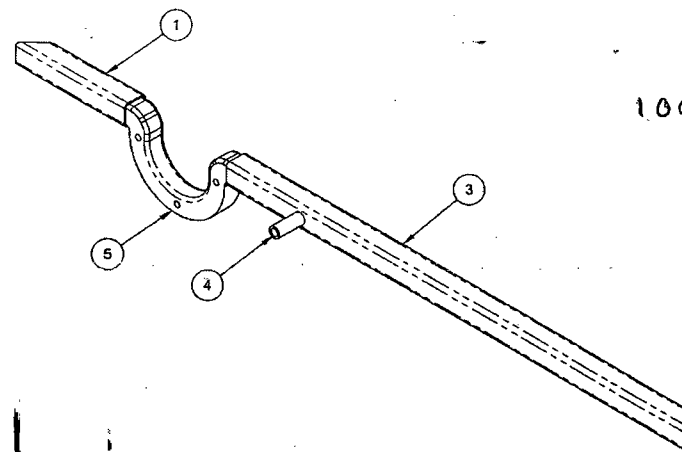
D4034-043 FWD UPPER RIB ASSY

100300 MLJ
13-04-24

RELEASED
2011-01-18

B	ADDITIONAL HOLES ADDED ON D4034-3 RIB	SC	10.12.20
A	NEW ISSUE	AJS	10.03.04
REV.	DESCRIPTION	BY	DATE

DESIGN	AJS	**DART AEROSPACE LTD**	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4034	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		UPPER RIB ASSY, BASKET BASE	NTS
DATE	10.12.20		

100300

D4034-3
RIB

25.00

8 PL

D4021-9
BUSHING
4 PL

D4034-041 AFT UPPER RIB ASSY

D4021-7
HOOP

D4034-1
RIB
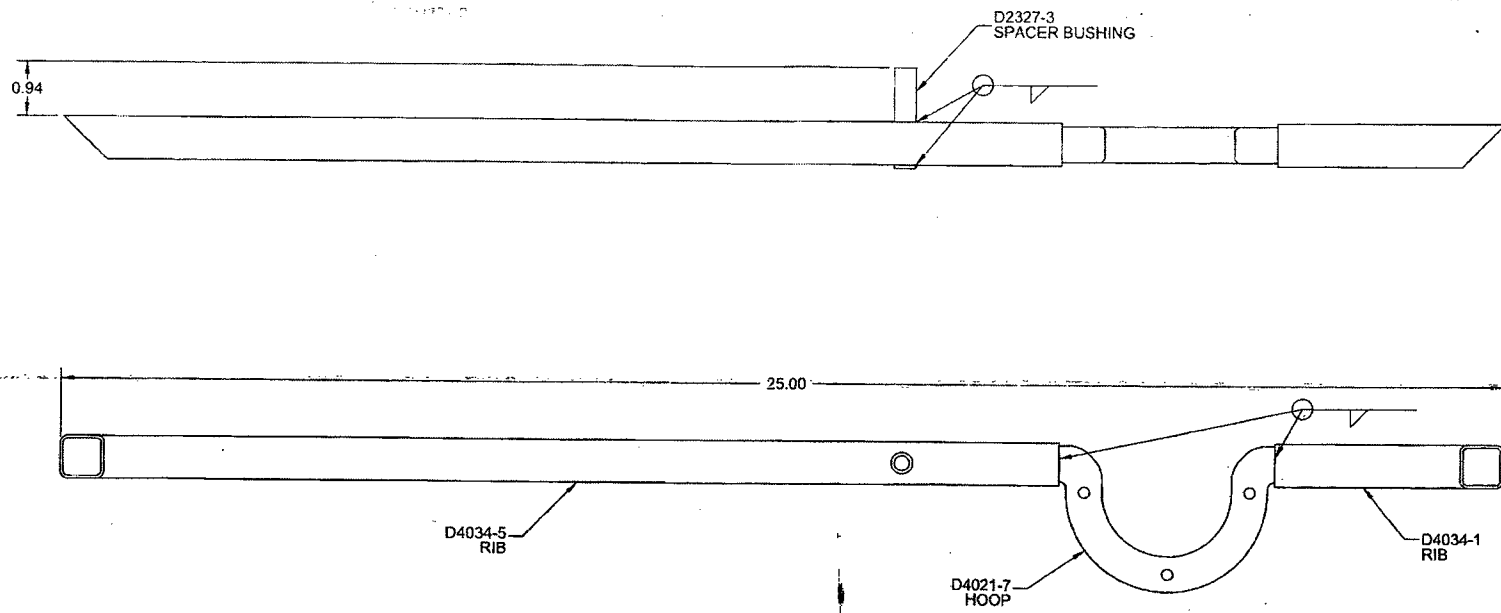
RELEASED
2011-01-28

NOTES:
1) MATERIAL: N/A
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.61 lbs
8) WELD PER DART QSI 004

DESIGN	AJS	**DART AEROSPACE LTD**		
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA		
CHECKED		DRAWING NO.		REV. B
MFG. APPR.		D4034		SHEET 2 OF 4
APPROVED		TITLE		SCALE
DE APPR.		UPPER RIB ASSY, BASKET BASE		NTS
DATE	10.12.20	COPYRIGHT © 2010 BY DART AEROSPACE LTD		

100300

D2327-3
SPACER BUSHING
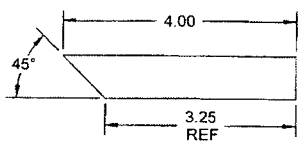
0.94

25.00

D4034-5
RIB

D4034-1
RIB

D4021-7
HOOP

D4034-043 FWD UPPER RIB ASSY

RELEASED
2011-01-18
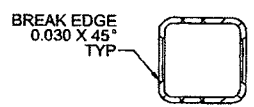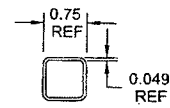
NOTES:
1) MATERIAL: N/A
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
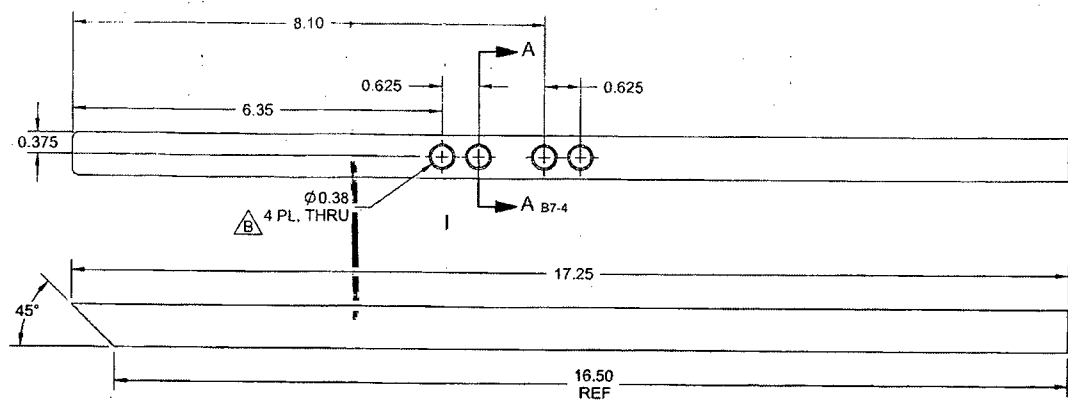6) IDENTIFICATION: N/A
7) WEIGHT: 1.58 lbs
8) WELD PER DART QSI 004

DESIGN	AJS	**DART AEROSPACE LTD**	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4034	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		UPPER RIB ASSY, BASKET BASE	NTS
DATE	10.12.20	COPYRIGHT © 2010 BY DART AEROSPACE LTD	

4.00

0.75 REF

45°

0.049 REF

3.25 REF

D4034-1 RIB

8.10

0.625

A

0.625

6.35

0.375

A B7-4

Ø0.38
4 PL. THRU

B

17.25

45°

16.50 REF

D4034-3 RIB

BREAK EDGE
0.030 X 45°
TYP

SECTION A-A D4-4

Ø0.375
THRU

2.75

0.375

17.25

45°

16.50 REF

D4034-5 RIB

NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
   REF DART SPEC. M304TS0.750W.049
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT -1: 0.13 lbs
       -3 & -5: 0.62 lbs

DESIGN	AJS	**DART AEROSPACE LTD**	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4034	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		UPPER RIB ASSY, BASKET BASE	NTS
DATE	10.12.20		